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10/685,803	10/16/2003	Uri L. Zilberman	25771-X	5141
20529 7590 11/23/2010 THE NATH LAW GROUP			EXAMINER	
112 South We	st Street		NELSON, MATTHEW M	
Alexandria, VA 22314		ART UNIT	PAPER NUMBER	
			3776	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/685,803 Filing Date: October 16, 2003 Appellant(s): ZILBERMAN, URI L.

> Derek Richmond For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/30/2010 appealing from the Office action mailed 12/3/2009.

Application/Control Number: 10/685,803

Art Unit: 3776

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application: Claims 1-10 are rejected and pending in the application.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

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subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

5,487,663	Wilson	01-1996
3,647,498	Dougherty	03-1972
6,186,790	Karmaker et al.	02-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. With respect to the Notice After Final filed on 9/3/2010, the reply is not entered. The amendment to the specification after Notice of Appeal includes the language "incorporated by reference in its entirety", however this is potentially new matter. Appellant must file a petition for priority when introducing this language as detailed in MPEP 201.11, specifically section III. This has also been addressed in an Advisory Action After the Filing of an Appeal Brief.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: Application/Control Number: 10/685,803 Page 4

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US 5,487,663) in view of Dougherty (US 3,647,498).
- 4. Wilson shows a dental crown (appliance 10) configured to be readily mountable in a patient's mouth as part of a treatment of primary teeth and permanent molars, the dental crown having a natural appearance (Fig. 1-5) and consisting of a thermoplastic layer (col. 4, lines 26-33) configured to define a tooth shaped top surface (Fig. 1-5); and depending flexible side surfaces extending continuously from said tooth shaped top surface towards a bottom portion of the dental crown (best seen in Fig. 4), said thermoplastic material layer being configured to enable dimensional stability and sufficient resilience of the crown (col. 3, lines 7-13); and a bottom portion (at 17 in Fig. 2-5) of at least one of said depending flexible continuous side surfaces, the resilience of the flexible depending side surfaces and bottom portion capable of enabling the dental crown to be directly mounted on a primary tooth or permanent molar (Fig. 1; col. 3, lines 7-13).
- 5. However, Wilson fails to show the bottom portion comprising an undercut defining an inwardly directed inner surface of said bottom portion in the main embodiment. It would have been obvious to one of ordinary skill in the art at the time of invention to have formed the crown with an undercut (negative draft) as taught by Wilson (col. 2, lines 46-56) in order to allow the crown to be snapped in place and take advantage of alternative attachment means known in the art.

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6. However, Wilson fails to show the dental crown the color of a vital tooth and being made of a specific thermoplastic material. Dougherty teaches dental crown (material) being subtly colored. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the crown to having subtle coloring in order to have a crown simulate natural tooth. Dougherty shows thermoplastic material of polymethylmethacrylate and further comprising pigment or filler. It would have been obvious to one of ordinary skill in the art as to the process and intermediate products used in the process by which the dental crown is made, for example, injection molding and multi-element mold, because a product claim is properly met if the final product is shown regardless of the process used.

- Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Dougherty and Karmaker et al. (US 6,186,790).
- Claim 10 is rejected similarly to the above and additionally the dental crown may be permanent (col. 4, lines 24-25). However, Wilson/Dougherty fail to show the polymer material as claimed.
- 9. Karmaker teaches a dental crown formed of a variety of thermoplastic polymer material including polycarbonate, polysulfone, polyacetal, polyacrylate and polymethacrylate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a polyacetal polymer of Karmaker, because Karmaker teaches the material was known as art-recognized equivalent material at the time the invention was made in forming dental components including crown forms.

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Furthermore, a specific polymer material is not disclosed as critical to the claimed invention. It is noted that Karmaker also show dental crown formed of a variety of processes including injection molding, compression molding and machining.

(10) Response to Argument

Appellant argues that Wilson does not correspond with the language of "consisting of" since Wilson uses a composite restorative material. However, the language of Wilson clearly states that the crown itself does not include the composite restorative material (col. 5, lines 1-3 for instance; or col. 4, lines 59-61). The composite restorative material is used with the crown, therefore the composite restorative material does not compose the crown.

Appellant argues that Wilson teaches away from the undercut, however Wilson is merely providing an alternative attachment means in the Appellant's citations and cannot be said to teach away from an undercut.

Appellant argues that including Dougherty to teach a thermoplastic material further comprising pigment or filler is improper due to the language of consisting of.

However, the pigment and filler of Dougherty would be part of the thermoplastic material layer and therefore conform to the current claim language. This reading of the reference is appropriate considering it is particularly in line with Appellant's current claim.

Appellant argues that Karmaker is improperly combined because it discloses a variety of thermoplastic materials and does not conform to the language of consisting. Art Unit: 3776

However, Karmaker specifically states that material is selected from those known in the

art of dental materials and the list of materials provided in col. 3, lines 35-42 for

instance. Karmaker is therefore stating that one thermoplastic polymer material may be

selected and not that the crown is formed of the entire variety of thermoplastic polymer

materials.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/MMN/

Conferees:

/Cris L. Rodriguez/ Supervisory Patent Examiner, Art Unit 3732

/Thomas C. Barrett/

Supervisory Patent Examiner, Art Unit 3775